

February 25, 2011

Water Use Efficiency Branch  
SBX7-7 Program  
P.O. Box 942836  
Sacramento, CA 94236-0001

**Submitted Electronically**

**Re: SBX7-7 Comments**

To Whom It May Concern:

The Oakdale Irrigation District (OID), Turlock Irrigation District (TID) and Modesto Irrigation District (MID) appreciate the opportunity to be involved in the Agricultural Stakeholder Committee (ASC) and subsequently the chance to comment on DRAFT documentation prepared by the Department of Water Resources (DWR). Please find our comments listed below specifically as it relates to the DRAFT Text of Regulation and the DRAFT Accuracy Standards. Please note that items discussed within the text of this correspondence are intended to cover the "big picture" items and as such, the attached documentation should be referenced for additional comments, questions and suggested changes.

1. The current approach allows for laboratory accuracies to be used for manufactured devices, but requires in-field testing of devices for all on-site or in-house built devices. There seems to be an inequity in this approach. Many on-site or in-house built devices are based on designs that are well evaluated and accepted measurement methods, with published accuracy ranges. Two (2) prominent such devices, the metergate and constant head orifice, have been tested and have published laboratory accuracies. Why should certification be determined through in-field testing of an individual device or statistically representative sample as the DRAFT Text of Regulation suggests when published laboratory data exists? Assuming that the device is constructed in accordance with standard details (designed and approved by a Professional Engineer or established in standard literature) for such an installation, the device should meet the published accuracy standards. Allowing for the use of published laboratory data for on-site or in-house built devices is consistent with using laboratory testing for manufactured devices.

Field testing and the associated in-field accuracy is difficult to determine (as has been discussed by the ASC and A2 at length), costly and likely provides no substantive data. However, if the device or installation is not built to standards, then in-field testing would be appropriate, and should also be allowed as an alternative.

Given the above noted information, consideration should be given to establishing two (2) categories of devices: (1) Manufactured devices, and (2) On-Site or In-House built devices.

2. The current approach divides the measurement location into two types: (1) the delivery point, and (2) upstream of the delivery point, and applies two different “accuracy” standards to the two different locations. Much of the rationale for this approach revolved around the issues associated with measuring irrigation deliveries for rice, for which flows can vary substantially over the course of a season. As a result, one measurement site may not be appropriate. Measurement of larger flows can be accomplished at the delivery point, but measurement of the lower flows at other times in the season cannot “accurately” be accomplished at the delivery point. These flows are more “accurately” measured at an upstream location.

Please note that “accurately” is included in quotations above to draw attention to a misperception that may be occurring. When it is implied that measurement of the lower flows, described above, could more “accurately” be measured at an upstream location, the inference was not that the device used to measure the accuracy would have a better accuracy rating, but that the installation would be appropriate for that device, and therefore provide a more accurate result.

While it is true, that measurement upstream of multiple customers generally equates to larger structures, more flow, less variable flow, more working room, less encroachments, etc., all of which serve as the justification for providing two (2) different measurement locations, in many instances the same device will be used in both locations. It’s impractical to expect a higher level of accuracy with the same device at a different location.

As a result, we would suggest that the measurement devices installed have the same accuracy standard, irrespective of location.

3. We would also suggest that there be a laboratory accuracy standard established for existing devices (i.e. installed/constructed after the date the regulation is established) and another for new devices (i.e. installed/constructed prior to the date the regulation is established), irrespective of measurement location. Recognizing a number of issues related to wear, construction techniques, general technological advancements, etc. for existing measurement devices, the existing device accuracy standard should inherently be greater.
4. It is further suggested that the accuracy standard for devices be reflective of the devices available, that are proven technology. While there may be new devices on the market that should be tested and evaluated, large-scale investments in technology should only be implemented once the technology has been tested and compliance can be documented. Unfortunately, the schedule for developing and implementing the measurement regulation, there is no time available to “test” these new technologies. As a result, the standards should be based on proven technologies. Please note that nothing in the DRAFT documentation reviewed to date precludes an agricultural water supplier from exceeding the numerical accuracy standards established, but we also recognize that establishment of unrealistic accuracy standards will preclude and/or significantly delay compliance for many agricultural water suppliers. Not a desirable outcome by either DWR or the agricultural water supplier.

5. Accuracy standards should also reflect the measurement available. The current language specifies the “flow rate” but many devices provide laboratory accuracies as a +/- X% by velocity. The limited time available to implement the regulation, does not allow for manufacturers to develop new laboratory ratings in time to implement by July 2012. Therefore it's appropriate to allow for the existing methodologies, whether it is flow rate, velocity, or volume based.

With the changes proposed in the above comments, the accuracy table would appear as follows:

**Accuracy** (Expressed as Velocity, Flow Rate or Volume)

	Existing Measurement Devices	New Measurement Devices
Manufactured Devices	XX%	AA%
On-site or In-house Built Devices	YY%	BB%

We recognize the intent is to move toward better measurement and accounting for water deliveries, and provide for conservation. These proposed modifications are designed to allow for better measurement and accounting and will be implemented along with the other regulatory requirements imbedded within SBx7-7, including Ag Water Management Plans and pricing structures. The water balance analysis and efficient water management practices required are designed to critically evaluate the efficiencies of irrigation supplier delivery systems, and steps needed to improve those efficiencies. As a result, the measurement regulations, combined with the other requirements will encourage future progress toward more accurate measurement.

Sincerely,

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